

Remarks

Reconsideration of this patent application is respectfully requested, particularly as herein amended.

The Office Action of February 26, 2008, first objects to the specification because the abstract is not considered to comply with the requirements of Section 608.01(b) of the Manual of Patent Examination Procedure. In reply, an amended Abstract has been submitted for this Patent Application. The amended Abstract has been reproduced on a separate sheet enclosed with this Reply, in accordance with the requirements of 37 C.F.R. §1.72(b), and entry of the amended Abstract is respectfully requested, overcoming the stated objection to the abstract for this Patent Application.

In addition, and although not specifically required by the Office Action, a substitute specification has been submitted for this Patent Application which includes section headings and which makes grammatical corrections resulting from translation of the original specification from French into English when steps were taken to enter the U.S. national stage of the International Application on which the present U.S. Patent Application is based. A marked-up copy of the original specification showing the changes which have been made in the substitute specification has also been enclosed, on separate pages, in accordance with the requirements of 37 C.F.R. §1.125(c). The substitute specification

includes no new matter, and entry of the enclosed substitute specification is therefore respectfully requested in accordance with 37 C.F.R. §1.125(b).

The Office Action next objects to claims 5 to 7 because such claims are considered to be in improper multiple dependent form, citing 37 C.F.R. §1.75(c) and Section 608.01(n) of the Manual of Patent Examining Procedure, and later rejects claims 1 to 4 under 35 U.S.C. §112, second paragraph, as being indefinite for stated reasons. In reply, applicant's claims 1 to 7 have been canceled and replaced with claims 8 to 22, none of which are currently in multiple dependent form, and which have been drafted in accordance with the requirements of 35 U.S.C. §112, second paragraph. It is submitted that this operates to overcome the objection to claims 5 to 7 under 37 C.F.R. §1.75(c) and Section 608.01(n) of the Manual of Patent Examining Procedure, and the rejection of claims 1 to 4 under 35 U.S.C. §112, second paragraph. In the event that any additional issues are identified which may require further consideration, the Examiner is invited to telephone the undersigned to discuss and resolve such issues.

The Office Action next objects to the drawings under 37 C.F.R. §1.83(a), requiring an illustration of structures which have been specified in the claims. In reply, and responsive to the requirements of 37 C.F.R. §1.121(d), one "Replacement Sheet" of drawings has been enclosed with this Reply showing amendments which have been made to the single figure presented.

As previously indicated, original claims 1 to 7 have been canceled and replaced with claims 8 to 22. Claims 8 to 22 no longer recite "temperature monitoring means" or "sealing means", but instead currently recite "sensors for monitoring the temperature and humidity of the treatment space" and "the step of sealing top and bottom portions of the load while placed in the treatment space".

Reference numbers 14 and 15 have been added to the single figure presented to illustrate sensors associated with the enclosed treatment space for monitoring the temperature and humidity of the treatment space, as is currently recited in the claims. Antecedent basis for the specific placements shown is found in French Patent Application No. 2 790 698, the subject matter of which was incorporated by reference in the present specification, noting lines 9 to 12 of page 6. From line 31 of page 9 through line 4 of page 10, FR 2 790 698 indicates that:

"The management of the temperature and of the humidity level prevailing in the enclosure during the treatment is obtained by temperature sensors and hygrometers (not shown) known in themselves and laid out on each of the longitudinal interior walls 13, 14 of the enclosure. Another sensor further placed in the enclosure allows a permanent control of the oxygen content of the heat-transfer fluid".

The sensors 14 and 15 have accordingly been placed along the interior walls of the enclosed spaced shown in the drawing for the present U.S. Patent Application.

Reference numbers 16 and 17 have been added to the

single figure presented to illustrate structures for sealing top and bottom portions of the load while placed in the treatment space, as is currently recited in the claims. Antecedent basis for the specific placements shown is again found in French Patent Application No. 2 790 698, the subject matter of which has been incorporated by reference in the present specification.

From line 28 of page 8 to line 2 of page 9, FR 2 790 698 indicates that:

"The sealing around the load is further obtained by modifying the height of the treatment zone 22 according to the variation of the height of the load of ligneous material to treat. For this purpose, the treatment zone 22 is equipped with a screen 42 of variable height vertically laid out between the top of the load 11 of ligneous material to treat and the partition 19 forming the bottom of the heating chamber 20 and, consequently, the ceiling of this treatment zone".

The reference number 16 has accordingly been placed to indicate the corresponding structure shown in the drawing for the present U.S. Patent Application.

Referring to lines 26 to 29 of page 9 of FR 2 790 698, it is indicated that:

"In order to avoid any penetration of oxygen inside the enclosure during the treatment, the enclosure 12 is made tight by the installation of sealing joints level with the door 18 and of siphons level with the evacuation openings 52".

The reference number 17 has accordingly been placed to indicate the corresponding structure shown in the drawing for the present U.S. Patent Application.

It is, therefore, submitted that with the amendments

made to the single figure presented for this Patent Application, the drawings are in full compliance with the requirements of 37 C.F.R. §1.83(a). Entry of the Replacement Sheet of drawings enclosed with this Reply is respectfully requested to overcome the stated objections to the drawings. Corresponding amendments have also been made to the substitute specification submitted with this Reply to incorporate the reference numerals 14, 15 (for the sensors) and 16, 17 (for the sealing structures).

Following this, and although initialed PTO-1449 forms have been returned to acknowledge receipt and consideration of the Information Disclosure Statement which was filed in this matter on August 24, 2005, Paragraph 5 of the Office Action of February 26, 2008, indicates that five of the cited documents (listed as the documents "AM", "AN", "AO" and "AP" on Sheet 1 of 2 of the submitted PTO-1449 forms and as the document "AL" on Sheet 2 of 2 of the submitted PTO-1449 forms) have not been considered because legible copies of these documents were not supplied.

It is respectfully submitted that for purposes of considering the five foreign documents at issue, the Information Disclosure Statement filed on August 24, 2005, fully complied with the requirements of 37 C.F.R. §1.98(a)(2)(i) and that the identified documents were properly considered.

As indicated on the "Filing Receipt" issued for the present U.S. Patent Application, "[t]his application is a 371 of

PCT/FR03/02884". Each of the documents which have been refused consideration were cited in the "International Search Report" issued for International Application No. PCT/FR03/02884. As indicated on the "Notice of Acceptance of Application Under 35 U.S.C 371 and 37 CFR 1.495" issued with the Filing Receipt, a copy of this International Search Report has been received by the U.S. Patent Office. Accordingly, it is submitted that there was no need to supply additional copies of the five foreign documents which have been refused consideration when the Information Disclosure Statement was filed on August 24, 2005, that the Information Disclosure Statement fully complied with the requirements of 37 C.F.R. §1.56 and 37 C.F.R. §1.98, and that the lined-through entries on the initialed PTO-1449 forms returned with the Office Action of February 26, 2008, were properly considered.

Nevertheless, and for the Examiner's convenience, copies of the five documents at issue, including EP 0 142 071 (Lignomat GmbH), FR 2 790 698 (Laurencot), FR 2 757 097 (BCI), FR 2 720 969 (Montornes) and FR 2 604 245 (Gautreau) have been enclosed with this Reply. Also submitted with this Reply are copies of a cover page from International Publication No. WO 00/53985 and EP 1 133 666, each of which claim the priority of French Patent Application No. 99/03179, which was published as FR 2 790 698. Because FR 99/03179 and EP 1 133 666 correspond to FR 2 790 698, these documents are cumulative and are not being

submitted for separate consideration, noting 37 C.F.R. §1.98(c), but rather are only being submitted to provide available English language translations of the abstract and claims of FR 2 790 698, which has previously been submitted for consideration, pursuant to 37 C.F.R. §1.98(a)(3)(ii).

It is, therefore, respectfully requested that the Examiner reissue the PTO-1449 forms submitted with applicant's Information Disclosure Statement filed on August 24, 2005, with initialed lines "AM", "AN", "AO" and "AP" on Sheet 1 of 2 of the submitted PTO-1449 forms and line "AL" on Sheet 2 of 2 of the submitted PTO-1449 forms to acknowledge the Examiner's consideration of EP 0 142 071 (Lignomat GmbH), FR 2 790 698 (Laurencot), FR 2 757 097 (BCI), FR 2 720 969 (Montornes) and FR 2 604 245 (Gautreau).

Because these documents were cited in an Information Disclosure Statement which was complete and duly filed before the mailing of a first Office Action on the merits in connection with the present U.S. Patent Application, it is submitted that no fee is required for consideration of the foregoing documents under 37 C.F.R. §1.17(p). However, in the event that a fee is deemed to be necessary for consideration of the above-discussed documents, any additional fees which may be required, or any overpayments, can be charged to Deposit Account No. 03-2405, and corresponding action is earnestly solicited.

The Office Action next rejects claims 1 to 4 under 35

U.S.C. §103(a) as being unpatentable over patents to Rosenau (US 4,356,641), Weis (US 3,744,144) and Little (US 5,325,604), which are cited in the alternative.

As previously indicated, original claims 1 to 7 have been canceled and replaced with new claims 8 to 22, which have been drafted to better comply with the requirements of 35 U.S.C. §112, second paragraph, and 37 C.F.R. §1.75. It is submitted that this also serves to overcome the stated rejections of claims under 35 U.S.C. §103(a).

Claims 8 to 22 are directed to the high-temperature heat treatment of a load of ligneous material, for purposes of making it possible to preserve the mechanical, acoustic and insulating characteristics of the wood being treated. This is to be distinguished from processes for drying wood products, which only serve to withdraw moisture from the wood. In addition to evacuating water from the wood being treated, high-temperature heat treatments also cause polymerization of the macromolecular chains of the constituents of the wood, which stabilizes the properties of the wood being treated.

Rosenau, Weis and Little disclose various processes for kiln-drying wood products, and provide no disclosure relating to a high-temperature heat treatment of a ligneous material. The drying procedures disclosed by Rosenau, Weis and Little are performed at temperatures on the order of 110 to 180 °F (i.e., 43 to 82 °C), which does not even approach the temperatures used

to perform a high-temperature heat treatment, which can reach 230 °C (i.e., 446 °F). As a consequence, a high-temperature heat treatment must be performed under controlled atmosphere, with a reduced oxygen content. Moreover, the various air flows in circulation must be controlled to uniformly treat the load of wood in terms of its quality. Absent this, the wood products obtained will be unusable. Moreover, without effective control of the oxygen content, there is a potential for ignition and the destruction of the oven.

Accordingly, it is submitted that the person of ordinary skill in the art at the time the present invention was made would not have referred to the disclosures of Rosenau, Weis or Little for purposes of developing a high-temperature heat treatment for ligneous material, and that the disclosures of Rosenau, Weis and Little would not have made the improvements of applicant's claimed method obvious to the person of ordinary skill in the art at the time the present invention was made, under 35 U.S.C. §103(a).

In view of the foregoing, it is submitted that this patent application is in condition for allowance and corresponding action is earnestly solicited.

Respectfully submitted,

  
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